

HEWLETT-PACKARD COMPANY  
Intellectual Property Administration  
P. O. Box 272400  
Fort Collins, Colorado 80527-2400

PATENT APPLICATION

ATTORNEY DOCKET NO. 10991300-3

**EV355228507**

IN THE  
UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s): Umberger et al.

Confirmation No.:

Application No.:

Examiner:

Filing Date:

Group Art Unit:

Title: Improving Host I/O Performance and Availability of a Storage Array During Rebuild by  
Prioritizing I/O Requests

Commissioner for Patents  
PO Box 1450  
Alexandria, VA 22313-1450

INFORMATION DISCLOSURE STATEMENT

Sir:

This Information Disclosure Statement is submitted:

- ☒ under 37 CFR 1.97(b), or  
(Within three months of filing national application; or date of entry of national application; or before mailing date of first office action on the merits; whichever occurs last)
- ☐ under 37 CFR 1.97 (c) together with either a:  
☐ Statement under 37 CFR 1.97(e), or  
☐ a \$180.00 fee under 37 CFR 1.17(p), or  
(After the CFR 1.97 (b) time period, but before final action or notice of allowance, whichever occurs first)
- ☐ under 37 CFR 1.97 (d) together with a:  
☐ Statement under 37 CFR 1.97(e)(1) or (2), and  
☐ a \$180.00 fee set forth in 37 CFR 1.17(p).  
(Filed after final action, a notice of allowance, on or before payment of the issue fee)

Please charge to Deposit Account **08-2025** the sum of \$0.00. At any time during the pendency of this application, please charge any fees required or credit any overpayment to Deposit Account **08-2025** pursuant to 37 CFR 1.25.

☒ Applicant(s) submit herewith Form PTO 1449 - Information Disclosure Citation together with copies, of patents, publications or other information of which applicant(s) are aware, which applicant(s) believe(s) may be material to the examination of this application and for which there may be a duty to disclose in accordance with 37 CFR 1.56.

☐ A concise explanation of the relevance of foreign language patents, foreign language publications and other foreign language information listed on PTO Form 1449, as presently understood by the individuals(s) designated in 37 CFR 1.56 (c) most knowledgeable about the content is given on the attached sheet, or where a foreign language patent is cited in a search report or other action by a foreign patent office in a counterpart foreign application, an English language version of the search report or action which indicates the degree of relevance found by the foreign office is listed on form PTO 1449 and is enclosed herewith.

It is requested that the information disclosed herein be made of record in this application.

☒ I hereby certify that this correspondence is being deposited with the United States Postal Service as ~~first class~~ mail in an envelope addressed to:  
Commissioner for Patents, Alexandria, VA  
22313-1450. Date of Deposit: 09/22/2003

OR

☐ I hereby certify that this paper is being transmitted to the Patent and Trademark Office facsimile number \_\_\_\_\_ on \_\_\_\_\_  
Number of pages: \_\_\_\_\_

Typed Name: Laurie Morgan

Signature: Laurie Morgan

Respectfully submitted,

Umberger et al.

By

Allan T. Sponseller

Attorney/Agent for Applicant(s)  
Reg. No. **38,318**

Date: **09/22/2003**

Telephone No.: **(509) 324-9256**

**PATENT APPLICATION**

Sheet 1 of 1

FORM PTO-1449

**LIST OF PATENTS AND PUBLICATIONS FOR  
APPLICANT'S INFORMATION DISCLOSURE  
STATEMENT**

(Use several sheets if necessary)

ATTY. DOCKET NO.

**10991300-3**

APPLICATION NO.

CONFIRMATION NO.

APPLICANT

**Umberger et al.**

FILING DATE

GROUP

**REFERENCE DESIGNATION**

**U.S. PATENT DOCUMENTS**

| EXAMINER<br>INITIAL |    | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | NAME            | Pages, Columns, Lines Where<br>Relevant Passages or Figures Appear |
|---------------------|----|--------------------|---------------------|-----------------|--|
|                     | 1A | 5,392,244          | 2/21/1995           | Jacobson et al. |  |
|                     | 1B | 6,516,425          | 02/2003             | Belhadj et al.  |  |
|                     | 1C | 6,032,217          | 02/2000             | Arnott          |  |
|                     | 1D | 5,941,993          | 08/1999             | Tanaka et al.   |  |
|                     | 1E | 5,881,311          | 03/1999             | Woods           |  |
|                     | 1F | 5,822,584          | 10/1998             | Thompson et al. |  |
|                     | 1G |                    |                     |                 |  |
|                     | 1H |                    |                     |                 |  |
|                     | 1I |                    |                     |                 |  |
|                     | 1J |                    |                     |                 |  |
|                     | 1K |                    |                     |                 |  |

**FOREIGN PATENT DOCUMENTS**

|  |    | DOCUMENT<br>NUMBER | PUBLICATION<br>DATE | NAME OF PATENTEE<br>OR APPLICANT | Pages/Columns/Lines Where<br>Relevant Passages/Figures Appear | Check if<br>Translation<br>attached |
|--|----|--------------------|---------------------|----------------------------------|---|-------------------------------------|
|  | 1L |                    |                     |                                  |   |                                     |
|  | 1M |                    |                     |                                  |   |                                     |
|  | 1N |                    |                     |                                  |   |                                     |
|  | 1O |                    |                     |                                  |   |                                     |
|  | 1P |                    |                     |                                  |   |                                     |

**OTHER REFERENCES (including Author, Title, Date, Pertinent Pages, etc.)**

|  |    |   |
|--|----|---|
|  | 1Q | CHEN, et al.; RAID: High-Performance, REliable Secondary Storage, June 1994, ACM Computing Suveys, Vol. 26, pages 141-184 |
|  | 1R |   |
|  | 1S |   |

EXAMINER

DATE CONSIDERED